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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,662	09/15/2003	Simon Anne de Molina	1316N-001683	1855

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EXAMINER	
WILLIAMS, THOMAS J	

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,662	MOLINA ET AL.	
	Examiner	Art Unit	
	Thomas J. Williams	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 0203* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/15/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed September 15, 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Concise explanations of Foreign French references 86 11039 and 88 16461 have not been provided. The applicant indicates in the information disclosure statement filed September 15, 2003 that English translations have been provided. However, the examiner is unable to locate these translations, nor does the 1449 form indicate such translations having been submitted.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the figures fail to illustrate a first end fitting of a piston rod connected to an axle, therefore the subject matter of claim 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement

sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The subject matter of claim 18 is not discussed in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claim 17, it is unclear to the examiner what the applicant intends to define as what is considered a valve that is "externally attached to the piston". The disclosure fails to provide any insight as to what the applicant considers an externally attached valve. The figures clearly illustrate a valve element, such as valve plate 28, that is disposed within a piston volume. Furthermore, the attachment means of the valve, such as pin 46, is clearly disposed within the

piston proper. As such the claim is rendered indefinite and will be broadly interpreted for examination purposes.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-5, 10, 11, 13, 20, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,706,362 to Faure.

Re-claims 1-5 and 10, Faure discloses a shock absorber piston assembly, comprising: a piston 41; a plurality of fluid passages between a first face and a second face of the piston; a plurality of valves 44 and 45, the valves include rebound valves 44 and compression valves 45, each valve actuates at an individual valve opening pressure (column 4 lines 28-37), a pin Q (figure 10), a compressible device (such as coil spring R); a shock absorber fluid contacts both faces, the rebound valves control fluid flow in a first direction, the compression valves control fluid flow in a second direction.

Re-claims 11 and 13, Faure discloses a shock absorber, comprising: a tube 2 containing a fluid; a piston assembly 7; the piston assembly includes a piston defining a plurality of passages extending between two working chambers, rebound valves, compression valves, the valves are preset to open over a plurality of valve opening pressures in successive order; the use of hydraulic oils (which are hydrocarbon based liquids) as the damping agent in shock absorbers is well known in the art.

Re-claims 20, 21 and 23, Faure discloses a method do dampen an automobile vehicle ride, the method comprising: orienting rebound and compression valves such that they allow a fluid flow in select directions, adjusting the valves to open at predetermined pressures by adjusting the preload of the springs or by varying the diameter of the passages, column 4 lines 28-37.

9. Claims 1-6, 10, 11, 13-16, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,823,922 to Ergun.

Re-claims 1-6 and 10, Ergun discloses a shock absorber piston assembly, comprising: a piston 28; a plurality of fluid passages between a first face and a second face of the piston, see figures; a plurality of valves, the valves include rebound valves 120 and compression valves 116 (see figures 8-10), each valve actuates at an individual valve opening pressure (column 5 lines 27-47, specifically lines 46-47), a pin 124, a compressible device (such as coil spring 126); a shock absorber fluid contacts both faces, the rebound valves control fluid flow in a first direction, the compression valves control fluid flow in a second direction; a bleed disc, interpreted as element 128 since it will allow fluid to bleed through the piston (see figures 8-10).

Re-claims 11 and 13-16, Ergun discloses a shock absorber, comprising: a tube 16 containing a fluid; a piston assembly 28; the piston assembly includes a piston defining a plurality of passages extending between two working chambers, rebound valves, compression valves, the valves are preset to open over a plurality of valve opening pressures in successive order; the use of hydraulic oils (which are hydrocarbon based liquids) as the damping agent in shock absorbers is well known in the art; each valve comprises a pin 124, a spring 126, a washer

(interpreted as element 128) linked to the pin; a valve plate (interpreted as valve element 122) engaging a land section of the piston.

Re-claims 20-22, Ergun discloses a method do dampen an automobile vehicle ride, the method comprising: orienting rebound and compression valves such that they allow a fluid flow in select directions, adjusting the valves to open at predetermined pressures by adjusting the preload of the springs or by varying the diameter of the passages, see column 5 lines 24-47. Element 128 acts as a shim, the thickness of which will in part vary the spring rate of the coil spring.

10. Claims 1-5, 7, 8, 10-17 and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,085,925 to Peddinghaus et al.

Re-claims 1-5, 7, 8 and 10, Peddinghaus et al. discloses a shock absorber piston assembly, comprising: a piston 4; a plurality of fluid passages between a first face and a second face of the piston; a plurality of valves, the valves include rebound valves and compression valves (see figures 4 and 5), each valve actuates at an individual valve opening pressure (column 2 lines 26-29 and column 4 lines 37-49 is interpreted by the examine as stating that the each of the valves open at individually adjustable valve opening pressure), a pin 30, a compressible device (such as coil spring 29); a shock absorber fluid contacts both faces, the rebound valves control fluid flow in a first direction, the compression valves control fluid flow in a second direction; a pin connection end, a washer slidably connected to the pin connection end, a fastener (indicated as a machine screw) engages the washer and the spring; a threaded nut is functionally equivalent to a machine screw in that each is a means of securing elements together.

Re-claims 11-16, Peddinghaus et al. discloses a shock absorber, comprising: a tube containing a hydro-pneumatic fluid; a piston assembly; the piston assembly includes a piston defining a plurality of passages extending between two working chambers, rebound valves, compression valves, the valves are preset to open over a plurality of valve opening pressures in successive order; the use of hydraulic oils (which are hydrocarbon based liquids) as the damping agent in shock absorbers is well known in the art; a pin, a compressible device (such as spring 29), a washer, a valve plate 28 engages a land portion of the piston.

Re-claims 17 and 19, Peddinghaus et al. discloses a shock absorber, comprising: a piston tube; a piston assembly; a shock absorber piston 4; a plurality of fluid passages in the piston between two working chambers; a plurality of rebound and compression valves, the valves are externally attached to the piston (each valve is disposed within an open space formed in the piston much like the instant invention); a piston rod connected to a vehicle body (see column 3 lines 52-55).

Re-claims 20-22, Peddinghaus et al. discloses a method do dampen an automobile vehicle ride, the method comprising: orienting rebound and compression valves such that they allow a fluid flow in select directions, adjusting the valves to open at predetermined pressures by adjusting the preload of the springs, such as by shimming the valve, the washer element is broadly interpreted as a shim.

11. Claims 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,827,539 to Fader et al.

Re-claims 17 and 18, Fader et al. discloses a shock absorber, comprising: a piston tube; a piston assembly; a shock absorber piston 44; a plurality of fluid passages 54, 56, 58 and 60 in the

piston between two working chambers; a plurality of rebound 70 and compression 72 valves, the valves are externally attached to the piston; a piston rod is connected to an axle assembly, see column 3 lines 15-16.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peddinghaus et al. in view of US 4,596,321 to Harper et al.

Peddinghaus et al. fails to teach the use of a shim disc to vary a preload of the valve spring. Harper et al. teaches that a preload of a valve spring can be varied by utilizing disc shims of various widths, see column 8 lines 63-68 to column 9 lines 1-11. It would have been obvious to one of ordinary skill in the art utilized a shim disc as taught by Harper et al. when having

adjusted the preload of the valve spring in Peddinghaus et al., thus providing an easy method by which to adjust the preload of the valve spring.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cameron and Henry-Biabaud each teach a means by which to adjust a preload of a valve spring. Rohacs teaches a piston having externally attached valves. Katz discloses a shock absorbing piston with a plurality of valves opening at various pressures.

Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder, can be reached at (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams
AU 3683
7-20-04

TJW

July 20, 2004